

### REMARKS/ARGUMENTS

Claims 1-10 are pending in this application. By this amendment, Applicant amends Claim 1.

Claims 1 and 6-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Matsuura (U.S. 6,131,023). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Matsuura, and further in view of Shaw (U.S. 5,953,043). Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Matsuura, and further in view of Sugiura et al. (US 2001/0022002). Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Matsuura and Sugiura et al., and further in view of Blumlein et al. (U.S. 2,263,376). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Matsuura and Sugiura et al., and further in view of Shaw. Applicant respectfully traverses the rejections of Claims 1-10.

Claim 1 has been amended to recite:

A CATV tuner, comprising:  
an input circuit connected to an input terminal for transmitting and receiving a signal to and from a CATV station, the input circuit including an upstream-signal input terminal, **a distributor**, a low-pass filter, an amplifier, and a downstream-signal output terminal;  
a first mixer circuit for mixing an output signal from the input circuit and a first local-oscillation signal so as to generate a first IF signal;  
a first oscillation circuit for transmitting the first local-oscillation signal to the first mixer circuit;  
a first IF circuit for processing the first IF signal;  
a second mixer circuit for mixing an output signal from the first IF circuit and a second local-oscillation signal so as to generate a second IF signal; and  
a second oscillation circuit for transmitting the second local-oscillation signal to the second mixer circuit; and  
a second IF circuit for processing the second IF signal;  
wherein at least one upstream signal is input to the upstream-signal input terminal so as to be transmitted to the CATV station, **the distributor distributes a reception signal to generate at least two distributed**

**signals** and transmits one of the distributed signals to the downstream-signal output terminal as a downstream signal so that the downstream signal is output therefrom, and the amplifier is arranged between the distributor and the downstream-signal output terminal so as to amplify the downstream signal, and the low-pass filter is arranged between the distributor and the amplifier so as to remove a CATV signal having a frequency that is higher than a predetermined upper limit frequency of the downstream signal; and

**the distributor is arranged between the upstream-signal input terminal of the input circuit and the first mixer.** (emphasis added)

The Examiner alleged that AAPA teaches all of the features recited in Applicant's Claim 1, except for the features of the amplifier being arranged between the distributor and the downstream-signal output terminal so as to amplify the downstream signal, and the low-pass filter being arranged between the distributor and the amplifier so as to remove a CATV signal having a frequency that is higher than a predetermined upper limit frequency of the downstream signal.

The Examiner further alleged that Matsuura teaches "the amplifier arranged between the distributor and the downstream-signal output terminal (fig. 1 elements 35, 46 and 52), so as to amplify the downstream signal (paragraph 8 lines 40-44), and the low-pass filter is arranged between the distributor and the amplifier (fig. 1 elements 46, 51 and 52) so as to remove a CATV signal having a frequency that is higher than a predetermined upper limit frequency of the downstream signal (element 51 is capable of removing unwanted frequencies, see paragraph 8 lines 34-36)."

Thus, the Examiner concluded that it would have been obvious to incorporate the low-pass filter, distributor, and amplifier arrangement as allegedly described by Matsuura within the device described in AAPA.

Applicant's Claim 1 has been amended to recite the features of "the distributor distributes a reception signal to generate at least two distributed signals" and "the distributor is arranged between the upstream-signal input terminal of the input circuit and the first mixer." Support for these features is found, for example, in the first full

paragraph on page 8 of the originally filed specification and in Fig. 1 of the originally filed drawings.

Element 46 of Matsuura et al., which the Examiner alleged corresponds to the distributor recited in Applicant's Claim 1, is completely different from the distributor recited in Applicant's Claim 1 and the distributor of AAPA. Particularly, element 46 of Matsuura et al. is disclosed as being a branching unit. As disclosed in lines 16-22 of col. 8 of Matsuura et al., the branching unit 46 of Matsuura et al. is arranged such that the branch of the branching unit 46 connected to the buffer amplifier 47 is selected when the signal applied to the terminal 1 is an analog signal and the branch of the branching unit 46 connected to the second intermediate frequency amplify circuit 48 is selected when the signal applied to the input terminal 1 is a digital signal.

In other words, the branching unit 46 of Matsuura et al. is arranged to direct a reception signal either to the buffer amplifier 47 or to the intermediate frequency amplify circuit 48. That is, the branching unit 46 of Matsuura et al. is capable of directing any given reception signal to only one downstream circuit element. The branching unit 46 of Matsuura et al. is clearly incapable of distributing a reception signal so as to generate two distributed signals that are directed to both the buffer amplifier 47 and the intermediate frequency amplify circuit 48. That is, the branching unit 46 of Matsuura et al. is incapable of directing a given reception signal to two different downstream circuit elements. In fact, Matsuura et al. fails to teach or suggest any circuit element which is capable of generating two distributed signals from a reception signal.

Thus, Matsuura et al. certainly fails to teach or suggest the features of "a distributor" wherein "the distributor distributes a reception signal to generate at least two distributed signals" as recited in Applicant's Claim 1.

Therefore, the arrangement of the low-pass filter 51, the branching unit 46, and the amplifier 48 would have been completely unsatisfactory for use in the device of AAPA. Particularly, if the low-pass filter 51, the branching unit 46, and the amplifier 48

of Matsuura et al. were incorporated in the device of AAPA, then a reception signal could not possibly be distributed so as to generate two distributed signals, which is required for the device of AAPA to operate as desired.

The Examiner is reminded that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) and MPEP § 2143.01.

In addition, even if the branching unit 46 of Matsuura et al. were capable of generating two distributed signals from a reception signal, the combination of Matsuura et al. and AAPA still would not teach or suggest the unique combination and arrangement of features recited in Applicant's Claim 1. Particularly, the low-pass filter 51, the branching unit 46, and the amplifier 48 of Matsuura et al. are, by necessity, arranged **downstream** of the first mixers 9-11, and cannot possibly be arranged between the input terminal 1 and the first mixers 9-11, i.e. upstream of the first mixers 9-11. Particularly, as noted above, the branching unit 46 of Matsuura et al. is specifically provided for the purpose of directing analog IF signals to the buffer amplifier 47 and digital IF signals to the second intermediate frequency amplify circuit 48. Thus, the branching unit 46 of Matsuura et al. must be arranged **downstream** of the first mixers 9-11, and cannot be arranged upstream of the first mixers 9-11, i.e. between the input terminal 1 and the first mixers 9-11. Thus, Matsuura et al. certainly fails to teach or suggest the feature of "the distributor is arranged between the upstream-signal input terminal of the input circuit and the first mixer" as recited in Applicant's Claim 1.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Matsuura.

The Examiner relied upon Shaw, Sugiura et al., and Blumlein et al. to allegedly cure various deficiencies of AAPA and Matsuura. However, Shaw, Sugiura et al., and Blumlein et al. clearly fail to teach or suggest the features of "the distributor distributes a

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reception signal to generate at least two distributed signals” and “the distributor is arranged between the upstream-signal input terminal of the input circuit and the first mixer” as recited in Applicant’s Claim 1. Thus, Applicant respectfully submits that Shaw, Sugiura et al., and Blumlein et al. fail to cure the deficiencies of AAPA and Matsuura described above.

Accordingly, Applicant respectfully submits that AAPA, Matsuura, Shaw, Sugiura et al., and Blumlein et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of features recited in Applicant’s Claim 1.

In view of the foregoing amendments and remarks, Applicant respectfully submits that Claim 1 is allowable. Claims 2-10 depend upon Claim 1, and are therefore allowable for at least the reasons that Claim 1 is allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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